

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A broadcast recording method utilizing a terminal device having a broadcast signal receiving function and a communication function, comprising:

~~a call detection step for detecting an incoming or outgoing call during receiving of a broadcast signal; and~~

~~a receiving failure detection step for detecting a failure to receive said broadcast signal during receiving of the broadcast; and~~

~~a recording step for recording the broadcast signal when an incoming or outgoing call is detected by said call detection step or when a failure of receiving said broadcast signal is detected by said receiving failure detection step~~

inquiring whether the broadcast signal should be recorded or not when an incoming or outgoing call is detected.

Claim 2 (Currently Amended): A broadcast recording method according to claim 1, further comprising:

~~a call termination detection step for detecting termination of the incoming or outgoing call of mobile communication;~~

~~a recovery detection step for detecting recovery of the receiving of the broadcast signal reception; and~~

~~a recording step for stopping recording of the said broadcast signal when the termination of the incoming or outgoing call of mobile communication is detected in said~~

~~call termination detection step or when recovery of the receiving of the broadcast signal reception is detected in said recovery detection step.~~

Claim 3 (Currently Amended): A broadcast recording method according to claim 2, further comprising ~~a playback step for playing back said recorded broadcast signal information, when the recording of the said broadcast signal is stopped by said recording step step.~~

Claim 4 (Currently Amended): A broadcast recording method according to claim 1, wherein ~~the in-said recording step said~~ broadcast signal is recorded in a recording device installed in the said terminal device.

Claim 5 (Currently Amended): A broadcast recording method according to claim 1, wherein ~~the in-said recording step said~~ broadcast signal is recorded in a recording device installed in an external recording server.

Claim 6 (Currently Amended): A broadcast recording method ~~according to claim 5 utilizing a terminal device having a broadcast signal receiving function and a communication function, comprising:~~

detecting an incoming or outgoing call during receiving of a broadcast signal;
detecting a failure to receive the broadcast signal during the receiving of a broadcast; and

recording the broadcast signal in the terminal device or in a recording device installed in an external recording server when an incoming or outgoing call is detected or recording the broadcast signal wherein in-said recording step said broadcast signal is recorded in a recording device installed in an external recording server when a failure to receive the broadcast signal is detected in-said receiving failure detection step.

Claim 7 (Currently Amended): A broadcast recording method according to claim 5, wherein the in-said recording step said broadcast signal is recorded in a recording device installed in an external recording server when it is impossible to record the said broadcast signal in a recording device installed in the said terminal device.

Claim 8 (Currently Amended): An information terminal device comprising a broadcast signal receiving function and a communication function, wherein the said device comprises a detector and a transmitter for transmitting transmits a command signal for recording a currently received broadcast signal in an the external recording server when the detector detects that it is detected that the broadcast signal cannot can not be received.

Claim 9 (Currently Amended): An information terminal device according to claim 8, wherein the currently received broadcast signal is recorded when an outgoing or incoming call is detected of a communication occurs.

Claim 10 (Currently Amended): An information terminal device comprising a broadcast signal receiving function and a communication function, wherein a currently received broadcast signal is recorded when an outgoing or incoming call of a communication occurs is detected during receiving of a broadcast signal, wherein the information terminal device comprises an interface configured to inquire whether the currently received broadcast signal should be recorded or not.

Claim 11 (Currently Amended): An information terminal device according to claim 10, wherein the said device comprises a transmitter for transmitting sends a command signal to record the currently received broadcast signal signals on an external recording server when it is detected that the said broadcast signal cannot can not be received.

Claim 12 (Currently Amended): A communication device comprising:
a broadcast signal receiver receiving portion for receiving a the broadcast signal;
a receiving-status detector portion for detecting a status of the broadcast signal
receiving status;
a receiving signal recorder recording portion for recording the broadcast receiving
information acquired from the received broadcast signal,
an incoming-outgoing call detector portion for detecting an incoming or outgoing
call, or termination of an incoming or outgoing [[a]] call; and
a recording-start/recording-stop/playback command information generating circuit
generator portion for generating the recording-start, recording-stop, and playback-
command information,

wherein the recording-start/recording-stop/playback command information
generating circuit generator portion sends recording command information for recording
the broadcast information signal to an external recording server via a communication
network when a broadcast signal receiving failure is detected by the receiving-status
detector portion, and sends the recording command information for recording the
broadcast information signal to an external recording server via a communication
network when an incoming or outgoing call is detected by the incoming-outgoing call
detector portion and/or notifies the receiving signal recorder recording portion about the
broadcast signal recording command information.

Claim 13 (Currently Amended): A communication device according to claim 12,
wherein the said recording-start/recording-stop/playback command information
generating circuit generator portion sends the recording command information for
recording the broadcast information signal to the external recording server via the ever a
communication network when the said incoming-outgoing call detector portion detects an

incoming or outgoing call and also when the that said receiving signal recorder recording portion cannot perform recording.

Claim 14 (Currently Amended): A communication device according to claim 12, comprising:

a playback information receiver receiving portion for receiving playback information from the recording server via over the communication network; and
a playback portion for playing back the said playback information,
wherein the said recording-start/recording-stop/playback command information generating circuit generator portion sends recording stop command information to stop recording of on the broadcast information signal to the external recording server via over the communication network when restoration of broadcast signal receiving reception is detected by the said receiving status detector portion and, sends recording stop information to stop recording of for the broadcast information signal to the external recording server via the communication network when termination of a call is detected by the said incoming-outgoing call detector portion and/or reports the recording stop information for the broadcast signal to the said receiving signal recorder recording portion.

Claim 15 (Currently Amended): A communication device according to claim 12, wherein the said recording-start/recording-stop/playback command information generating circuit generator portion sends recording/playback command information when recording stop command information to stop recording of for the broadcast signal is sent to the an external recording server, and reports the recording/playback information when the said recording stop command information for the broadcast signal is reported to the said receiving signal recorder recording portion.

Claim 16 (Currently Amended): A communication device according to claim 15, wherein the said recording/playback information includes contains as a playback time the time from generating of the said recording command information to the time when the said recording stop information is generated.

Claim 17 (Currently Amended): A recording server comprising:
a broadcast signal receiver receiving portion for receiving broadcast signals;
a receiving signal recorder recording portion for receiving broadcast receiving information acquired from the broadcast signals; and
a controller control portion for reporting recording commands or playback commands to the said receiving signal recorder recording portion when a recording command or a playback command is received over a communication network,
wherein the said recording server sends the said playback information over the said communication network when playback commands are received over the said communication network.

Claim 18 (Currently Amended): A broadcast recording system comprising a recording server including containing a recording device and an information terminal device having broadcast signal functions and communication functions, wherein
the said recording server records the broadcast information being received by the said information terminal device when a failure of receiving is detected during receiving of the said broadcast information signal by the said information terminal device.

Claim 19 (Currently Amended): A broadcast recording system according to claim 18, wherein the said recording server stops recording of the broadcast information when the said information terminal device detects signal reception recovery of the receiving of the broadcast information.

Claim 20 (Currently Amended): A broadcast recording system according to claim 18, wherein the said recording server records broadcast information currently received by the said information terminal device when the said information terminal device starts communicating during the receiving of broadcast information signals.

Claim 21 (Currently Amended): A broadcast recording system according to claim 18, wherein the said recording server stops recording of the broadcast information when the communication on said terminal information terminal device stops communicating ends.

Claim 22 (Previously Presented): A program for implementing the broadcast recording method according to claim 1.

Claim 23 (Original): A recording medium holding a program for implementing the broadcast recording method of claim 22.

Claim 24 (Currently Amended) A broadcast recording method for recording a broadcast program viewed or recorded on a user's mobile communication device containing communication functions and broadcast receiving functions by utilizing a program recording device including containing a receiving function, wherein the said method comprises:

~~a video recording channel information receiving step for receiving as video-recording channel information, the broadcast program channel information sent from a mobile communication device and recorded or viewed on the mobile said communication device;~~

~~a user control information recording step for recording the received video-recording channel information received in said video recording channel information receiving step that corresponds to the said user or mobile communication device;~~

~~an interruption source detecting step for detecting a the cause of interruption of that the user stops recording or viewing a program on the said mobile communication device;~~

~~a recording information command generating step for generating recording command information containing the said video-recording channel information of the said user or mobile communication device that is recorded in said user control information recording step, when an interruption source is detected in said interruption source detecting step; and~~

~~a recording command information transmitting step for sending the generated recording command information generated in said recording information command generating step to the said program recording device and for recording said video-recording channel information of the broadcast program in said program recording device.~~

Claim 25 (Currently Amended): A broadcast recording method for broadcast programs according to claim 24, wherein the interruption comprises said interruption source detecting step is a call detection step for detecting at least one of either an outgoing or incoming call for a mobile communication device.

Claim 26 (Currently Amended): A broadcast recording method for broadcast programs according to claim 25, further comprising:

~~a call termination detection step for detecting termination of at least one of either the an incoming or outgoing call detected by said call detection step; and~~

~~a recording notification step for notifying the said mobile communication device of the recording of the said broadcast program based on the generated recording command information generated by said recording command information generating step based on said call termination detection step.~~

Claim 27 (Currently Amended): A broadcast recording method for broadcast programs according to claim 25, further comprising:

~~a call termination detection step for detecting termination of at least one of either the an incoming or outgoing call detected by said call detection step;~~

~~a recording notification/inquiry step for notifying the said mobile communication device of recording of a broadcast program based on the generated recording command information generated by said recording command information generating step, based on termination of the call by said call termination detection step and for inquiring on whether or not the said recorded broadcast program is necessary based on the detected said call termination detection step;~~

~~a record deleting command information generating step for generating deleting command information for deleting the said broadcast program when a reply that the said recording is not needed is sent from the said mobile communication device in response to the inquiring said recording notification/inquiry step; and~~

~~a record deleting command information transmitting step for transmitting the generated record deleting command information generated in said record deleting command information generating step to the said program recording device, and deleting the said broadcast program from the said broadcast recording device.~~

Claim 28 (Currently Amended): A broadcast recording method for broadcast programs according to claim 24, wherein ~~the detecting said interruption source detecting step~~ further comprises:

~~a terminal status information receiving step for receiving terminal status information showing a terminal status of its own device reported from said the mobile communication device; and~~

~~a recording necessity detection step for detecting a the necessity level for recording a broadcast program viewed or recorded on the said mobile communication~~

device, from the received terminal status information ~~received by said terminal status information receiving step~~.

Claim 29 (Currently Amended): A broadcast recording method for broadcast programs according to claim 28, wherein the said terminal status information is received receiving step periodically ~~receives~~ in synchronization with preset time terminal status information showing terminal status of ~~its own device reported from said the~~ mobile communication device.

Claim 30 (Currently Amended): A broadcast recording method for broadcast programs according to claim 28, wherein the said terminal status information is received receiving step constantly ~~receives terminal status information~~ as updated information after a change in terminal status is reported from the said mobile communication device during terminal status changes.

Claim 31 (Currently Amended): A broadcast recording method for broadcast programs according to claim 28, wherein the detecting of the said recording necessity level detection step detects the need for recording a broadcast program by detecting at least one abnormal terminal status due to radio wave difficulties occurring in the said mobile communication device, insufficient recording capacity, or worn batteries based on the received terminal status information ~~which is received in said terminal status information receiving step~~.

Claim 32 (Currently Amended): A broadcast recording method for broadcast programs according to claim 28, further comprising:

~~a recording necessity end detection step for~~ detecting canceling of the necessity for recording a broadcast program viewed or recorded on the said mobile communication

device, from the received terminal status information received in said terminal status information receiving step; and

~~a recording notification step for notifying the said mobile communication device of recording of a broadcast program based on the generated recording command information generated by said recording command information generating step based on detection of the canceling of the end in said recording necessity for recording end detection step.~~

Claim 33 (Currently Amended): A broadcast recording method for broadcast programs according to claim 28, further comprising:

~~a recording necessity end detection step for detecting canceling of the necessity for recording a broadcast program viewed or recorded on the said mobile communication device, from the received terminal status information received in said terminal status information receiving step;~~

~~a recording notification/inquiry step for notifying the said mobile communication device of recording of a broadcast program based on the generated recording command information generated by said recording command information generating step, based on detection of the canceling of the by said recording necessity for recording end detection step, and also inquiring on whether or not the said recorded broadcast program is necessary;~~

~~a record deleting command information generating step for generating delete command information for deleting the said recording when a reply that the said recording is not needed is received from the said mobile communication device in response to the inquiring said recording notification/inquiry step; and~~

~~a record deleting command information transmitting step for transmitting the generated delete record deleting command information generated in said record deleting command information generating step to the said program recording device, and deleting the said broadcast program recorded in the said broadcast recording device.~~

Claim 34 (Currently Amended): A broadcast recording method for broadcast programs according to claim 24, wherein the said video-recording channel information is received receiving step periodically receives in synchronization with preset time channel information on the broadcast program sent from a mobile communication device and viewed or recorded on the said mobile communication device.

Claim 35 (Currently Amended): A broadcast recording method for broadcast programs according to claim 24, wherein the said video-recording channel information is received receiving step constantly receives channel information reported from the mobile communication device devices as updated information after a change in channels occurs.

Claim 36 (Currently Amended): A broadcast recording method ~~for broadcast programs~~ for recording broadcast programs distributed on a communication link line by streaming to a mobile communication device containing a streaming broadcast receiving function, wherein the said method comprises:

~~a distribution step for~~ streaming distribution of broadcast programs via the [[a]] communication link line to the [[a]] mobile communication device;

~~an interruption source detection step for~~ detecting a the cause of interruption of receiving of broadcast programs distributed by streaming via the [[on a]] communication link line to the said mobile communication device;

~~a distribution step step for~~ receiving an the interruption source detection and from the interruption source detection step, for stopping the streaming distribution to the said mobile communication device, and ~~for~~ recording the ending position of the currently-ended currently ended streaming;

~~an interruption source end detection step for~~ detecting an the end of the interruption source status detected in said interruption source detection step; and

~~a distribution restart step for receiving an the interruption end detection from said interruption source end detection step, and for restarting the streaming distribution of the broadcast program from the recorded streaming ending position recorded in said distribution stop step.~~

Claim 37 (Currently Amended): A broadcast recording method ~~for broadcast programs~~ according to claim 36, wherein the detecting of a cause of interruption comprises ~~said interruption source detection step~~ ~~is a call detection step~~ for detecting at least one of either an outgoing or incoming call on the [[a]] mobile communication device, and the detecting of an end of the interruption comprises ~~said interruption source end detection step~~ ~~is call termination detection step~~ for detecting termination of a detected ~~an~~ outgoing or incoming call ~~detected~~ by ~~said call detection step~~.

Claim 38 (Currently Amended): A broadcast recording method ~~for broadcast programs~~ according to claim 36, wherein

the detecting of a cause of said interruption source detection step further comprises:

~~a terminal status information receiving step for receiving terminal status information relating to a showing the status of the its own device reported from a mobile communication device; and~~

~~a recording necessity detection step for detecting a the need to record a broadcast program viewed or recorded by the said mobile communication device, from the received terminal status information received by said terminal status information receiving step, and~~

the detecting of an end of the said interruption comprises detecting source end detection step ~~detects~~ canceling of the necessity for recording a broadcast program viewed or recorded by the said mobile communication device, from the received terminal status information ~~received by said terminal status information receiving step~~.

Claim 39 (Currently Amended): A communication control device connectable by a communication link line to a program recording device containing broadcast receiving functions and a mobile communication device containing broadcast receiving functions and communication functions, wherein the said communication control device comprises:

a video-recording channel information receiver receiving means for receiving as video-recording channel information, the broadcast program channel information sent from a mobile communication device and viewed or recorded on the [[a]] mobile communication device;

an user control information recorder recording means for recording the video-recording channel information received by the video-recording channel information receiver receiving means, corresponding to the user or mobile communication device devices;

an interruption source detector detection means for detecting a the cause of interruption of viewing or recording of the said broadcast program on the said mobile communication device;

a recording information command generating circuit means for generating recording command information containing the video-recording channel information ~~based on the video recording channel information of the user or mobile terminal device that is recorded in the user control information recording means~~, when an interruption source is detected in the said interruption source detector detection means; and

a recording command information transmitter transmitting means for sending the generated recording command information ~~generated in said recording information command generating means to the said program recording device, and for recording the broadcast program of the video recording channel information into said program recording device.~~

Claim 40 (Currently Amended): A communication control device connectable via a communication link line to a program recording device containing broadcast receiving functions and a mobile communication device containing broadcast receiving functions and communication functions, wherein the said communication control device comprises:

a video-recording channel information receiver receiving means for receiving as video-recording channel information, the broadcast program channel information sent from a mobile communication device and viewed or recorded on the [[a]] mobile communication device;

an user control information recorder recording means for recording the video-recording channel information received by the video-recording channel information receiver receiving means, corresponding to the users of mobile communication device devices;

a call detector detection means for detecting at least one of either an incoming or outgoing call for the said mobile communication device;

a recording information command generating circuit means for accepting the detection of the outgoing or incoming call on the mobile communication device by the said call detector detection means, and for generating the recording command information containing the video-recording channel information based on video-recording channel information of the mobile terminal device recorded in said user control information recording means; and

a recording command information transmitter transmitting means for sending the generated recording command information generated in said recording information command generating means to the said program recording device, and for storing said video recording channel information of the broadcast program.

Claim 41 (Currently Amended): A communication control device connectable via a communication link line to a program recording device containing broadcast

receiving functions and a mobile communication device containing broadcast receiving functions and communication functions, wherein the said communication control device comprises:

a video-recording channel information receiver receiving means for receiving as video-recording channel information, the broadcast program channel information sent from a mobile communication device and viewed or recorded on the [[a]] mobile communication device;

an user control information recorder recording means for recording the received video-recording channel information received by said video recording channel information receiving means, corresponding to the users or mobile communication device devices;

a terminal status information receiver receiving means for receiving terminal status information showing a the terminal status of the its own device reported from a mobile communication device;

a recording necessity detector detection means for detecting a the necessity level for recording a broadcast program viewed or recorded on the said mobile communication device, from the received terminal status information received by said terminal status information receiving means;

a recording information command generating circuit means for accepting detection results of the recording necessity detector detection means, and for generating the recording command information containing video recording channel information based on the video-recording channel information of the user or mobile terminal device recorded in the user control information recording means; and

a recording command information transmitter transmitting means for sending the generated recording command information generated in said recording information command generating means to the said program recording device, and for recording said video recording channel information of the broadcast program.

Claim 42 (Currently Amended): A communication control device for streaming distribution of a broadcast program by a communication link line to a mobile communication device containing streaming broadcast receiving functions, comprising:

an interruption source detector detection means for detecting a the status of the mobile communication device causing interruption of receiving of the broadcast program by streaming distribution;

an interruption source end detector detection means for detecting an end the end of the interruption source detected by said interruption source detection means;

a distribution end position recorder recording means for recording the streaming position distributed to the said mobile communication device; and

a streaming distribution circuit means for receiving data indicative of the detecting of the interruption source end detection from said interruption source end detection means, and for stopping the streaming distribution to the mobile communication device, and along with recording the stream position at the end of the current stream distribution in the said position recorder recording means, for receiving an the interruption source end detection from the said interruption source end detector detection means and for restarting the streaming distribution from the distribution end stream position recorded in the said position recorder recording means.

Claim 43 (Currently Amended): A communication control device for streaming distribution of a broadcast program via a communication link line to a mobile communication device containing a streaming broadcast receiving functions, comprising:

a call detector detection means for detecting at least either an incoming or outgoing call on the mobile communication device during streaming distribution of a broadcast program over the [[a]] communication link line;

a call termination detector detection means for detecting termination of the detected a call from an incoming or outgoing call detected by said call detection means;

a distribution end position recorder recording means for recording the stream position distributed to the said mobile communication device; and

a streaming distribution circuit means for responding to receiving detection of the incoming or outgoing call on a mobile communication device by the from said call detector by detection means, and for stopping the streaming distribution to the mobile communication device, and along with recording the stream position at the end of the current stream distribution by the said position recorder recording means, for responding to data indicative of receiving detection of call termination of the incoming or outgoing call calls by the call termination detector by detection means, and for restarting the streaming distribution from the distribution end stream position recorded by the in said position recorder recording means.

Claim 44 (Currently Amended): A communication control device for streaming distribution of a broadcast program via a communication link line to a mobile communication device containing a streaming broadcast receiving function, comprising:

a terminal status information receiver receiving means for receiving terminal status information relating to a showing the terminal status of its own device reported from a mobile communication device;

a recording necessity detector detection means for detecting a the necessity level for recording a broadcast program viewed or recorded on the that mobile communication device, from the received terminal status information received by said terminal status information receiving means;

a recording necessity end detector detection means for detecting canceling of the necessity for recording a broadcast program viewed or recorded on the that mobile communication device, from the received terminal status information received by said terminal status information receiving means;

a distribution end position storage device recording means for storing the stream position distributed to the said mobile communication device; and

a streaming distribution circuit means for receiving a detection from the said recording necessity detector detection means, for stopping the streaming distribution to the said mobile communication device, and along with recording the stream position at the end of the current stream distribution in the said position storage device recording means, for receiving a detection from the said recording necessity end detector detection means, and for restarting the streaming distribution from the distribution end stream position recorded in the said position storage device recording means.

Claim 45 (Previously Presented): A program according to claim 24 for implementing a broadcast recording method for broadcast programs on a computer.

Claim 46 (Previously Presented): A recording medium according to claim 24 readable by a computer loaded with a program for implementing a broadcast recording method for broadcast programs on a computer.

Claim 47 (New): A broadcast recording method according to claim 1, wherein the broadcast signal is recorded in a recording device installed in an external recording server when it is impossible to record the broadcast signal in a recording device installed in the terminal device.

Claim 48 (New): A broadcast recording method according to claim 2, wherein the broadcast signal is recorded in a recording device installed in an external recording server when it is impossible to record the broadcast signal in a recording device installed in the terminal device.

Claim 49 (New): A broadcast recording method according to claim 3, wherein the broadcast signal is recorded in a recording device installed in an external recording

server when it is impossible to record the broadcast signal in a recording device installed in the terminal device.

Claim 50 (New): A broadcast recording method according to claim 4, wherein the broadcast signal is recorded in a recording device installed in an external recording server when it is impossible to record the broadcast signal in a recording device installed in the terminal device.

Claim 51 (New): A broadcast recording method utilizing a terminal device having a broadcast signal receiving function and a communication function, comprising:
selecting a manual mode for inquiring whether the broadcast signal should be recorded or not, or an automatic mode for recording automatically the broadcast signal;
detecting an incoming or outgoing call during receiving of a broadcast signal; and
recording the broadcast signal based on the selecting of the manual mode or the automatic mode when an incoming or outgoing call is detected.

Claim 52 (New): A broadcast recording method according to claim 51, further comprising:
detecting termination of the incoming or outgoing call;
detecting recovery of the receiving of the broadcast signal; and
stopping recording of the broadcast signal when the termination of the incoming or outgoing call is detected or recovery of the receiving of the broadcast signal is detected.

Claim 53 (New): A broadcast recording method according to claim 52, further comprising playing back the recorded broadcast signal information, when recording of the broadcast signal is stopped.

Claim 54 (New): A broadcast recording method according to claim 51, wherein the broadcast signal is recorded in a recording device installed in the terminal device.

Claim 55 (New): A broadcast recording method according to claim 51, wherein the broadcast signal is recorded in a recording device installed in an external recording server.

Claim 56 (New): A broadcast recording method according to claim 51, wherein the broadcast signal is recorded in a recording device installed in an external recording server when it is impossible to record the broadcast signal in a recording device installed in the terminal device.

Claim 57 (New): A broadcast recording method utilizing a terminal device having a broadcast signal receiving function and a communication function, comprising:
detecting a failure to receive a broadcast signal during receiving of a broadcast;
and

recording the broadcast signal when a failure of receiving broadcast signal is detected.

Claim 58 (New): A broadcast recording method according to claim 57, wherein the broadcast signal is recorded in a recording device installed in an external recording server when it is impossible to record the broadcast signal in a recording device installed in the terminal device.

Claim 59 (New): An information terminal device having a broadcast signal receiving function and a communication function, comprising:
a manual mode for inquiring whether a broadcast signal should be recorded or not, and an automatic mode for recording automatically the broadcast signal,

wherein when an incoming or outgoing call is detected during receiving of a broadcast, the broadcast signal is recorded based on either the manual mode or the automatic mode.

Claim 60 (New): An information terminal device according to claim 59, wherein the device sends a command signal to record currently received broadcast signals on an external recording server when it is detected that the broadcast signal cannot be received.